

IN THE CLAIMS

1-6. (*Canceled*)

7. (*Previously Presented*) A process for forming an electrical connection to a semiconductor device comprising:

forming a first metal-containing layer, wherein the first metal containing layer:

5 contacts an exposed region that includes silicon carbide; and
 has a composition that does not form an ohmic contact with a doped silicon carbide if annealed for a time period of less than ten hours and at a temperature less than a melting point of a material within the metal-containing layer; and

10 annealing the metal-containing layer and the exposed region at a temperature less than the melting point of the metal-containing layer and for a period of time in excess of ten hours, wherein a substantially continuous ohmic contact region is formed between the first metal-containing layer and the silicon carbide.

8. (*Original*) The process of claim 7, wherein the material is aluminum.

9. (*Original*) The process of claim 7, wherein annealing is performed for a time period of at least twenty hours at a temperature in a range of approximately 400-660 C

10. (*Original*) The process of claim 7, wherein the composition is substantially pure aluminum.

11. (*Currently Amended*) The process of claim 7, ~~wherein: the — claim 7,~~ wherein: the material is aluminum; and the composition comprises aluminum and a first dopant, wherein the composition is at least approximately 90 weight percent aluminum.

12. (*Original*) The process of claim 7, wherein annealing is performed for a time period of at least approximately 25 hours.

13. (*Original*) The process of claim 7, wherein annealing is performed at a temperature no greater than approximately 660 degrees.

14. (*Original*) The process of claim 7, wherein annealing forms an aluminum silicon carbide alloy.

15. (*Original*) The process of claim 7, wherein the exposed region is p-type doped.

16. (*Original*) The process of claim 7, wherein annealing is performed in a vacuum.

17. (*Original*) The process of claim 7, wherein annealing is performed using a noble gas.

18. (*Original*) The process of claim 7, further comprising:
removing a portion of the first metal containing layer; and
forming second metal containing layer over the contact region.

19. (*Original*) A process for forming an electrical connection to a semiconductor device comprising:

forming a metal-containing layer that contacts an exposed region, wherein the exposed region includes silicon carbide; and

5 annealing the metal-containing layer and substrate for a time period of at least approximately ten hours and at a temperature of at least approximately 300 C.

20. (*Original*) The process of claim 19, wherein the metal-containing layer is substantially pure aluminum.

21. (*Original*) The process of claim 19, wherein the metal-containing layer comprises at least approximately 90 weight percent aluminum.

22. (*Original*) The process of claim 19, wherein annealing is performed for a time period of at least approximately 25 hours.

23. (*Original*) The process of claim 19, wherein annealing is performed at a temperature no greater than approximately 660 degrees.

24. (*Original*) The process of claim 19, wherein annealing forms an aluminum silicon carbide alloy.

25. (*Original*) The process of claim 19, wherein the exposed region is p-type doped.

26. (*Original*) The process of claim 19, wherein annealing is performed in a vacuum.

27. (*Original*) The process of claim 19, wherein annealing is performed using a noble gas.

28. (*Original*) The process of claim 19, wherein annealing forms an ohmic contact between the metal-containing layer and the exposed region.